# TOWN OF WILMINGTON Water Department Rules & Regulations

The following regulations are a part of the contract with every person who takes water and govern the relations between the Water Department and its Consumers and Contractor/Developers who install water systems.

All prior and existing rules and regulations are hereby amended and these rules and regulations substituted in place thereof except that where notice has already been given, or steps taken to enforce the payment of overdue water bills. In such cases, the Water Department shall continue to have the right to proceed with such enforcement under the terms and conditions of the rules and regulations then in effect.

These rules and regulations have been accepted by the Water and Sewer Commission and will be in full force and effect as of October 16, 2008.

Joseph J.	Balliro Jr	., Chairman	
Matthew .	J. Kane, Jı	•••	

# Town of Wilmington

# Water Department Rules and Regulations

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#### I. DEFINITIONS AND TERMS

- 1. **Building:** any structure used for human occupancy, employment, and recreational or other purposes.
- 2. **Commercial/Industrial Meter:** any meter <u>larger than 5/8"</u> used in non-residential structures.
- 3. **Commercial/Industrial Unit:** a single, commercial or industrial unit, whether rented or owned by the business or occupant, which has independent ingress and egress or has common ingress and egress with other units within a building or structure, but with separate commercial or industrial facilities. Examples may include, but are not limited to; stores located in shopping centers or separate office or condominium units within a single building or structure.
- 4. **Consumer:** any person(s) who obtains water from a water pipe, fire hydrant or private yard hydrant supplied by a public water main. (i.e. owner, tenant, occupant, lessee, firm, corporation, developer, contractor etc.)
- 5. **Consumption:** the amount of water used, as measured by a meter or as estimated by the Water Department in accord with its billing.
- 6. **Curb Stop:** the part of the water system, usually located at or near the owner's property line, where the Town has complete access and control to shut off the water supply to the premises. Beyond this point, the water system belongs to and is the responsibility of the owner.
- 7. **Distribution System:** the network of pipe used for the delivery of water from the source facilities to the consumer's system, generally terminated at the curb stop located at the property line.
- 8. **Hydrant:** a device connected to a public water main for the purpose of extinguishing fires or other authorized purpose.
- 9. **Hydrant Use Permit:** a written permit granted by the Water Department for the temporary use of a hydrant.
- 10. **Licensed Drainlayer:** Any individual or company who possesses a license issued by the Water & Sewer Superintendent, to perform water main installations, extensions or repairs, fire hydrant installations or repairs, water service installations or repairs (before the meter) and any other work performed on the Wilmington water distribution system, whether on private or public property.
- 11. **Master Meter:** a meter used for billing purposes serving a building or group of buildings.

- 12. **Meter:** an instrument for measuring the flow of water.
- 13. **Meter Pit:** an underground vault enclosing a meter.
- 14. **Owner:** a person who alone, or jointly or severally with others, has the legal title to any premises or has care, charge or control of any premises as agent, executor, administrator, trustee, lessee or guardian of the estate of the holder of legal title.
- 15. **Plumber:** a person licensed as a plumber by the Commonwealth of Massachusetts.
- 16. **Potable Water:** water fit for human consumption in conformance with the regulations of the Massachusetts Department of Environmental Protection (D.E.P.).
- 17. **Private Fire Protection:** private water mains, hydrants and appurtenances installed for the purpose of fire protection at a particular premises.
- 18. **Public Fire Protection:** the public water mains, hydrants and appurtenances for the purpose of fire protection, installed in a public way, Town-owned easement or private way open to public travel.
- 19. **Public Water Main:** the piping and associated valves, hydrants and appurtenances installed in a public way, Town-owned easements, or private way open to public travel for the purpose of supplying water to one or more consumers or for public fire protection.
- 20. **Residential Meter:** a meter 5/8 inches or less in size used to measure the flow of water to a residential property.
- 21. **Service:** a water supply connection to a household of one or more people, stores, garages, laundries, or manufacturing establishments.
- 22. **Service Pipe:** the pipe running from the main in the street to include the curb stop and curb box at the property line, a shut off valve, meter, and meter connection inside the cellar wall.
- 23. **Shut Off:** the closing of a control valve to temporarily stop water service or to terminate water service.
- 24. **Terminate:** the cessation of water service, pursuant to the Water Department's billing, termination and appeal regulations or for violation of these regulations.
- 25. **Town:** the Town of Wilmington Water Department.

26. **Water Used:** any water supplied by the Department or any other water system to a consumer's water system after it has passed through the point of delivery and is no longer under the sanitary control of the water purveyor.

## II. <u>AUTHORITY & RIGHTS OF WATER DEPARTMENT</u>

## A. Rules & Regulations

- 1. No representative of the Water Department has the authority to change or modify said rules and regulations. The Water Department will not recognize or be bound by any claimed change or modification hereof.
- 2. The rules and regulations of the Water Department may be altered or amended at the discretion of the Water and Sewer Commission and shall be included as part of the contract with every consumer. All persons taking water from the Department shall be deemed to accede to and be bound thereby.
- 3. The Water and Sewer Commission reserves the right to change or amend these rules and regulations, and make additions thereto or exceptions therefrom, at any time without advance notice, and to establish and assess penalties for violations, including the right to suspend or terminate water service.

## B. Rights of Access

- 1. Agents or representatives of the Water Department may enter the property of a consumer at all reasonable times for the purpose of reading meters, inspecting or examining pipes, fixtures or attachments used by the consumer.
- 2. Right of Access: Duly authorized representatives of the Water Department may inspect the property or the facilities of any consumers (including facilities under construction) to ascertain compliance with these regulations. Consumers of premises where water service pipes or fire pipes are located shall allow properly identified Water Department representatives ready access, at all reasonable times during normal business hours and at such other times as the Water Department reasonably suspect that a violation of the regulations may be occurring, to such parts of the premises as would enable Water Department personnel to inspect observe, measure, sample and test:
  - a. water use;
  - b. buildings;
  - c. water quality;
  - d. meters;
  - e. water service pipes;
  - f. fire pipes
  - g. cross connections and backflow preventers; and
  - h. other facilities that the Water Department reasonably believes may be contributing to a violation of these Rules and Regulations.
- 3. Right of Entry: Upon proper identification and at reasonable times during normal business hours and at such other times as the Water Department reasonably suspects that a violation of these Rules and Regulations may be occurring, duly authorized representatives of the Water Department shall be permitted to enter all private property through which the Water Department holds an easement for the purpose of inspection, observation, measurement, sampling, testing, maintenance, repair or reconstruction of any portion of a public water

- main lying within said easement. All entry and subsequent work, if any, shall be done in full accordance with the terms of said easement.
- 4. Security Clearance: Where a consumer has security measures in force that would require clearance before entry to the premises, the consumer shall make necessary arrangements to permit Water Department personnel to enter without undue delay for the purpose of carrying out their specific responsibilities.

## C. Consequences

- 1. Consequences of Denial of Entry or Access: Where a consumer, after having received reasonable notice from the Water Department refuses to permit properly identified Water Department personnel to enter or have access to premises or facilities in accordance with the terms of this section, the Water Department may forthwith give written notice of its intent, which may be up to and including the termination of water service to such consumer.
- 2. When the Water Department determines that a) a violation of these regulations, or b) any damage to the public water mains, is threatened or has occurred, any one or more of the following actions may be taken:
  - a. The Water Department may shut off water service as authorized elsewhere in these regulations.
  - b. The Water Department may issue an order to cease and desist any such violation and may direct the violator(s) as follows:
    - (1) To comply with these Rules and Regulations and with the cease and desist order either forthwith or in accordance with a time schedule set forth by the Water Department; or
    - (2) To take appropriate remedial preventive action in the event of a threatened violation.
  - c. The Water Department may require the consumer in question to submit a detailed schematic plan and time schedule showing the specific actions to be taken in order to prevent or correct a violation. The Water Department may modify such schematic and time schedule, or require such other actions within such times, as the Water Department deems appropriate.
  - d. The Water Department may take direct enforcement action by filing suit in any court of competent jurisdiction pursuant to any applicable statute or regulation.

## III. LIABILITY

- 1. The Town does not guarantee constant pressure nor uninterrupted service, nor does it assure the consumer either a full volume of water or the required pressure per square inch necessary to effectively operate hydraulic elevators, sprinkler systems or other appliances, the same being subject to all the variable conditions that may take place in the use of water from the Town mains.
- 2. No consumer shall be entitled to damages, or to have payment refunded, for any interruption of supply occasioned either by accident to any portion of the works, or by shutting off for the purpose of additions or repairs to the works, or by the stoppage or shortage of supply due to causes beyond the control of the Water Department, such as excessive drought, excessive use of and waste of water by other consumers, or by leaks or defects in the pipes or appliances owned by him or other consumers.
- 3. The Town will not be responsible for damages caused by dirty water resulting from the opening or closing of any gate for repairs or system maintenance, the use of any hydrant, or the breaking of any pipe.
- 4. The Town assumes no liability for conditions, which exist in consumer's pipes and causes trouble coincident to or following the repairs of any main pipe, service pipe, meter or other appliance belonging to the Water Department.
- 5. The Water Department reserves the right at any time without notice to shut off the water in the mains for purposes of making repairs, extension or for other necessary purposes. Consumers having boilers or other appliances on their premises depending on the pressure in the pipes to keep them supplied with water are hereby <u>CAUTIONED</u> against danger from these sources, and are required to provide, at their own expense, suitable safety appliances to protect themselves against such danger. In any event, it is expressly stipulated that the Department will not be liable for any damage resulting from water having been shut off, either through accident or necessity.

#### IV. WATER RATES AND BILLING

## A. Billing Process

- 1. The Water and Sewer Commission shall establish rates and charges for the use of water and reserve the right to change the rates and charges as needed. Rates will be adjusted annually at the start of each fiscal year or as needed to maintain funds needed to operate the water system.
- 2. The current rates and charges are shown in Attachments I and II.
- 3. Water bills and service charges are due 30 days from date of issue. Unpaid bills will be subject to a 5% late fee on any current balance due. Unpaid bills, service charges and late fees will become a lien on the real estate property tax bill.
- 4. Meter readings that cannot be obtained will result in a 3,000 cubic foot estimate for residential accounts. This charge will be adjusted when a meter reading is obtained. If after that billing quarter, a meter reading is still not obtained, an 8,000 cubic foot charge will be applied every quarter thereafter which is nonrefundable.
- 5. If a meter reading is not obtained for an industrial or commercial size meter, the amount of the estimate and/or charge will be based on the size of the meter. (See Attachment II). The estimates or charges will be applied the same as above.
- 6. Any water account that requires an adjustment due to consumer failure to allow accurate meter readings will be subject to a non-refundable \$25.00 special reading fee. Water Department personnel must obtain a meter reading in order to adjust a 3,000 cubic foot estimated bill. Water bills will only be adjusted for the previous billing quarter.
- 7. In the event that a consumer will be out of Town during any billing quarter and we are unable to obtain a meter reading, the Water Department must be notified in advance in order to avoid estimated billings. No charge will occur if the Department is notified in advance.
- 8. Consumers are responsible for the cost of all water supplied to their property, as indicated by their water meter, whether used, or wasted, intentional or unintentional, deliberate or by accident.
- 9. Payment for all final bills must be made by cash, money order, certified, bank or attorney's iolta check, in order to avoid the possibility of final payments becoming uncollectible due to insufficient funds. Both a visual and electronic reading must be obtained to generate a final bill.
- 10. Any account on which a payment that was made by check, where the check is returned by the town's depository bank as uncollectible after having been presented twice for deposit, shall be assessed a non-refundable returned check fee of \$25.00 which shall be added to the penalty, or if there is no outstanding penalty shall be assessed as the penalty. Additionally, the payment shall be reversed in the amount of the returned check and the account shall thereafter be treated, for collection purposes, as if the payment was not made.
- 11. For those not on the Town's water system, the rate for filling pools, irrigation and other outside water use activities will be the same rate as

stated in the water rate table unless a separate rate is approved by the Commission (see Attachment II).

#### B. Abatement Process

- 1. The Superintendent and Town Treasurer have authorization to act as an agent for the Water & Sewer Commission, with the Water & Sewer Commission being the appeal authority, to approve or deny billing adjustments, corrections and abatement requests less than \$10.00. Those approved will be presented in the form of a list consisting of the name, address, commercial or residential building, dollar amount and reason, to the Water & Sewer Commission for ratification.
- 2. Requests for abatements of water bills or any portion thereof must be filed at the Town Hall in the Treasurer/Collectors office on the proper form entitled "Abatement Request Form".
- 3. The Water and Sewer Commission, at a duly organized public meeting to be posted at the Town Hall, will review abatement requests and make a decision based on the content of these rules and regulations.

#### V. METERS

#### A. General

- 1. All water services shall be metered and where there is more than one tenant or occupant on the premises, the meter rates, rules and regulations of the Water Department shall apply to each. In all cases, the **owner** of the property supplied shall be held responsible for the water rates and all other charges, including that of all other consumers in the building.
- 2. Unless written approval is granted by the Superintendent, there will be one master meter for each service.
- 3. All meters will be easily accessible for reading and inspection.
- 4. Meters and/or readers (ERT's) may not be removed except by or under the supervision of Water Department personnel. Only Water Department personnel may remove or replace the seals, which if broken, may indicate the meter has been tampered with. Any violation of this rule may result in fines and/or criminal charges. In all cases, any damage to the meter and/or reader or seals shall be repaired and the cost will be charged to the property owner.
- 5. The Water Department is not responsible for leaks on the consumer's property. The owner will be ultimately responsible for all water, which passes through a meter, whether caused by use, leaks or waste.
- 6. There shall be a meter for every service and no consumer shall attach or cause to be attached, a pipe to a metered service pipe or main for the purpose of furnishing water to an unmetered building or water using appliance.
- 7. All residential, commercial and industrial meters shall be AWWA Water Department approved and shall read in cubic feet with readout digits displayed in a single row and be able to be read by the Departments remote reading device.
- 8. The consumer should notify the Water Department if the building is vacant and it is desired to shut off the water upon which time a meter reading must be obtained for billing purposes. When a service is turned off, the meter will be removed and returned to the water department.
- 9. No meter bypasses will be allowed for industrial, commercial or residential establishments without the written approval of the Superintendent and in those cases, only with a meter installed on the bypass line. A compelling reason will be needed to consider a bypass.
- 10. Based on AWWA Standard C700, all meters shall be tested by agents or representatives of the Wilmington Water Department at the following intervals or as directed by the Superintendent:

 $1 \frac{1}{2}$  - 4 inch 5 years 6-8 inch 3 years

For this procedure only, all meters are considered new as of 1/1/2005

## B. Residential Meters

1. The Water Department will furnish, install and/or supervise installation, seal and maintain all residential meters. The owner will provide a readily accessible, adequate and proper space or housing, which shall be heated, to protect it from freezing. Cost of repair for

- neglect, tampering or vandalism shall be paid by the property owner. All residential metering equipment is the property of the Town. All buildings with multiple tenants must have one master meter installed to record all water entering the building.
- 2. The Water Department will test, remove, repair and/or replace residential meters as part of regular maintenance program or as needed.
- 3. The accuracy of the meter on any residential property will be tested by the Water Department, upon written request of the owner. Testing is performed according to AWWA Standard C700. If, on such test the meter is found to register under or over two percent more water than actually passes through it, the meter will be replaced. The water bill for the <u>current</u> period will be adjusted in accordance with the result of the test. If, however, it appears that the consumer was charged or has paid for less water than they should have, then the meter will be replaced, they shall not be charged with the additional amount, but will be charged the expense of the examination and test (Refer to Chapter 40, Section 39I of the Massachusetts General Laws), plus labor and administration costs.
- 4. If a meter fails to register or is determined to be out of order, the Water Department will notify the consumer requesting that they make an appointment to have the meter replaced. The consumer will be charged at the average daily consumption as shown by the meter when in order for the corresponding period of one year preceding. If past usage is undeterminable due to a lack of history (i.e. all estimated readings), a minimum of 3,000 cubic feet for that quarter will be charged.
- 5. If the consumer does not respond to the notice and have the meter replaced, a non-adjustable bill of 10,000 cubic feet will be rendered every quarter thereafter until the meter is replaced.
- 6. The Water Department will periodically read the inside meter to verify the accuracy of the remote recorder the department uses to obtain your meter reading. In the case of a discrepancy between the two readings, the inside meter reading will be considered accurate and the consumer will be billed accordingly.

#### C. Industrial/Commercial Meters

- 1. Commercial and Industrial meters shall be furnished, installed and maintained by the owner but shall be of a size, type and located as approved by the Superintendent based on the AWWA Manual Section M22 and M6 or as amended. All meters will be remote read as required by the Department.
- 2. If an industrial/commercial meter appears to have gone out of order, the owner will be notified via certified mail. The owner will have 10 business days from receipt of letter to notify the Water Department of what action has been taken for the repair or replacement of the meter and 20 business days to have the actual repair or replacement completed.
- 3. Failure to respond to the first notice will result in a second notice informing the owner that if in 10 business days, the meter is not

- repaired or replaced water service to the building will be shut off. The billing will be based on the highest quarterly usage out of the last four billing cycles.
- 4. Water Department personnel must be present for inspection when the new or repaired meter is installed and a new seal will be placed on the meter.
- 5. The Superintendent can require that a large commercial or industrial meter be tested if there is reason to believe that said meter is not registering water accurately. Meter tests on industrial/commercial meters will not be performed by the Town and will be done at the owner's expense. The Water Department must be notified if the meter is being removed to be tested.
- 6. Large meters are required to be tested per AWWA Standards C700 and C702 at the consumer's expense.
- 7. The Superintendent, at his discretion, may direct an owner of a large meter to have the same analyzed to determine whether the meter size is appropriate.
- 8. Any meter larger than 2" must be compound.

#### VI. WATER SERVICE CONNECTIONS

#### A. General

- 1. Service connections shall be made under the direction of the Superintendent or his designee. No dwelling, house, or other building or structure shall be connected by any service pipe without such authorization nor shall any person otherwise use water supplied by the Town except with the formal consent of the Water & Sewer Commission or the approval of the Superintendent. Any person violating this section is subject to prosecution under the provisions of Chapter 165, Section 11 of the Massachusetts General Laws.
- 2. Prior to any work being performed the owner or his agent will be required to:
  - a. Fill out the Service Installation Form at The Superintendents office.
  - b. Pay the connection fee (See Attachment I).
  - c. Submit a plan showing the location of the water service, any existing or proposed sewage/septage systems, utilities or other appurtenances that may affect the water service.
- 3. Water service connections to be installed will require an advanced 24 hours notice. All private contractors must have a valid drainlayer license and bond to install water services (See Article X). Inspection of water service connections will be subject to rates as shown in the schedule of service charges (See Attachment I). All connections shall be inspected by Water Department personnel prior to backfilling.
- 4. The Water Department may take a maximum of ten (10) days to review building permit applications, and ten (10) days to review occupancy permits to ensure all costs are paid and inspection work is complete.
- 5. The Water Department will not allow activation of any new service unless all charges due the Water Department have been paid and all inspection work is completed.
- 6. For services to be terminated, it is required that the property owner physically disconnect the pipe at the water main. The owner is responsible for all costs incurred in the process.
- 7. The Water Department, in now way, assumes any responsibility for frozen service lines. Necessary thawing of lines and/or repairs are the responsibility of the property owner

## B. Materials

- 1. All small service lines shall not be less than ¾" and shall be type k copper tubing, or ¾" PE (150-PSI min. meeting ANSI/AWWA C901-96 Standard) plastic tubing as approved by the Superintendent. The service from the water main up to the curb box will be type k copper and a minimum of 30 feet out from the foundation will be type k copper.
- 2. All corporations, curb stops, unions or fittings shall be Mueller, Ford, Red-Head or other such fittings as approved by the AWWA and ultimately the Superintendent. No Hayes fittings (compression type) will be allowed. All curb stops shall open left.
- 3. Curb boxes shall be the adjustable Buffalo type six foot (6') bury.
- 4. Water services that are a distance of 150 feet or more from the water main to the foundation will require a 1" tap. The service from the water

main up to the curb box will be type k copper and a minimum of 30 feet out from the foundation will be type k copper. Plastic pipe, PE, (See Section VI.B.1) will be installed in-between but must be 150 PSI minimum and will require detectable metallic underground tape.

#### C. Installation

- 1. All services shall be installed perpendicular to the dwelling.
- 2. All service lines shall be installed with a minimum of four and a half feet (4 ½) and a maximum of six feet (6) of cover to <u>finished grade</u>.
- 3. Service pipes shall be backfilled with sand or other suitable fine material to twelve inches (12") over the pipe. The remaining trench shall be backfilled with suitable material with no stone or boulder over one cubic foot (1cf) in size.
- 4. No water taps will be made to any water main smaller than 6 inches in diameter.
- 5. Taps at the main shall be direct and saddles will not be allowed unless approved by the Superintendent.
- 6. All service valves shall be installed in the OFF position. Water Department personnel only shall turn a service on or off.
- 7. A meter and valve of approved type will be installed on each service. Larger size service pipes or meters will be allowed only upon special permission. All meters shall be installed in locations accessible for reading and maintenance and shall not be installed under the foyer or enclosed entrance to dwellings with split entry designs.
- 8. It is the intent of the Water Department to restrict installation of water services through property owned by parties other than the proposed. Residential services through easements to serve a maximum of two (2) single family homes may be allowed if the Water & Sewer Commission determines that extending a water main in the public way is not practical or beneficial to the Town. Each individual service must be shown on the definitive subdivision plan and must be approved by the Superintendent. The Water Department will not be responsible for any repairs on pipes and other appurtenances within the easements.
- 9. No other source of water; ie: wells tanks, etc., shall be connected to any pipe supplying potable water from the Town system without the written approval of the Board of Water and Sewer Commissioners and the Massachusetts D.E.P. (Refer to GLC Chapter 111, Section 160A) (310 CMR 22.22). (See Section XI)

## D. <u>Underground Irrigation Sprinkler Systems</u>

- 1. The installation of underground irrigation sprinkler systems will be allowed but the following criteria must be met:
  - a. The sprinkler connection to the water service will be after the meter.
  - b. A moisture/rain sensor will be installed for water conservation purposes.
  - c. An approved backflow device will be installed for water safety purposes.
  - d. Sprinkler systems shall operate between the hours of 5:00 PM and 9:00 AM ONLY.

2. Consumers are reminded that if a water emergency or water shortage were to occur or be declared, the use of water for irrigation purposes could be banned temporarily or permanently if conditions warrant it. It is to be expected that outdoor water use, at a minimum, will be restricted to once or twice a week as the Commission deems appropriate.

#### VII. MAINTENANCE

## A. Service Maintenance & Repairs

- 1. The Water Department, in no way, assumes any responsibility for reseeding of lawns or replacement of shrubs or trees or other landscaping damaged in the performance of repair work requested by the homeowner.
- 2. The Town will not tap and install new water services to new structures, buildings, dwellings, garages etc.
- 3. Prior to the Town making any repairs on a service, a Water Department representative will examine the service and provide for the consumer to sign a Request for Water Department Services form which will give a description of the recommended repairs and <u>estimated</u> cost.
- 4. The Town will not make any repairs on a water service past the meter.
- 5. The Town will absorb the cost of repairs on the service between the water main and the curb stop unless it is at the request of the owner for the purpose of upgrading the service. When upgrading from a ¾" service to a 1" service, the owner will pay the difference between the tapping fees (See Attachment I), labor and materials plus 10% and administrative fees.
- 6. The owner will be responsible for the cost of labor and material incurred between the curb stop and the meter, plus 10% and administrative fees. The Town will charge for materials based on the Water Department's most current purchase price.
- 7. Labor rates are the average hourly rate of distribution maintenance crews including 23.82% of benefits cost. (See Attachment I)
- 8. The owner may hire a licensed drainlayer to perform any repairs on the service. It will be necessary that Water Department personnel inspect the work and will be subject to the inspection fee (See Attachment I).
- 9. If a building is vacant and the water service is found to be leaking, the Town reserves the right to shut the service off without prior notice. The Town will attempt to notify the owner of the leak and the shut down. The Town will not be held responsible for any damage to pipes, hot water heaters, boilers or any other appliance that may have been caused by the service being shut off. The water will remain turned off until the leak is repaired in accordance with all requirements set forth in these rules and regulations.
- 10. When a consumer is notified of a non-critical leak on their property, they will have 48 hours to make necessary repairs. If repairs are not made within 48 hours, the water service will be repaired by the Water Department and charged accordingly to the property owner. If the owner is unwilling to affect repairs, the Department will terminate water service until the necessary repairs are made
- 11. The Water Department is not responsible for making repairs to any water service at an industrial or commercial building. The Water Department does however, have the authority to deem a leak an emergency and order or take immediate action.
- 12. Pipes not owned by the Town will be kept in good repair.

#### B. <u>Distribution Maintenance & Repairs</u>

- 1. The Water Department reserves the right at any time without notice to shut off the water mains for making repairs, extensions or for other necessary purposes. Consumers having boilers or other appliances on their premises depending on the pressure in the pipes to keep them supplied with water are hereby <u>CAUTIONED</u> against danger from these sources, and are required to provide, at their own expense, suitable safety appliances to protect themselves against such danger. In any event, it is expressly stipulated that the Department will not be liable for any damage resulting from water having been shut off, either through accident or necessity.
- 2. Each spring, the Water Department will perform a water main flushing program, which aids in removing sediments that collect in the pipeline, resulting in improved water quality. All gates and hydrants will be checked for proper operation. This program may cause some discoloration and change in water quality. Public notification will be given by way of local newspaper and WCTV. The Department can not be held liable for any damage to plumbing or household items.

#### VIII. WATER MAINS

#### A. General

- 1. The Superintendent shall determine main sizes and valve locations when development plans are submitted. In determining main size, the present and potential future water supply requirements of the area will be taken into consideration. The minimum water main size shall be 8" in diameter.
- 2. Before installing any water main, approval must be obtained by the Superintendent.
- 3. The Superintendent, in conjunction with the Fire Chief, shall determine hydrant locations.
- 4. Unless otherwise specified in writing and signed by the Water & Sewer Commission, all water mains, hydrants, valves and associated appurtenances located within public ways, Town owned easements and private ways open to public travel within the Town are owned by the Town.
- 5. The Superintendent shall control the use of all public water mains in Town. No person shall, without prior written authorization from the Superintendent, uncover, make any connection with or opening into, alter or disturb a water main or service.
- 6. When installing a new water main to provide water to a parcel, it is required that the main be extended to the furthest property line, where an inline gate and a fire hydrant will be installed and/or the extended portion of the main will be tapped into an existing adjacent water main for looping purposes, all to be determined at the discretion of the Water Superintendent. A water service lateral, from the main to the curb stop, shall be provided for any and all parcels along the alignment of the extension that are not presently on Town water.
- 7. In general, water main installation shall conform to the Manufacturer's recommendations, the Department of Environmental Protection Regulations and the Towns construction specifications.
- 8. All water mains being installed by licensed drainlayers shall be under the full time inspection of a person designated by the Superintendent. (See Section X for drainlayer regulations).
- 9. Water mains to be installed in a proposed development that will be owned, operated and maintained by the Town shall only be constructed in public streets or proposed public streets.
- 10. Water mains may be located in easements only when it is determined by the Water & Sewer Commission, upon written recommendation of the Superintendent and the concurrence of the Fire Chief, to be in the best interest of the public safety, of improved water quality and of minimized maintenance activity. When water mains are located in easements, the results will be properly laid out and recorded at the Registry of Deeds, by the owner of the property and/or reflected in any or all subsequent deeds effecting the easement. Water mains located in easements shall be constructed in accordance with construction standards set forth by the Water Department Rules and Regulations. Easements shall be a minimum of twenty feet (20") wide.

11. No installation of new water services or mains will be permitted in the roadway during the winter season when road opening permits are not being issued by the Department of Public Works, except in such cases as the Superintendent deems emergencies.

#### B. Materials

- 1. Water mains shall be cement-lined, seal-coated ductile iron pipe with push-on type joints. Pipe shall conform to AWWA standard C151-76 or latest revision thereof (Class 52).
- 2. Valves shall conform to AWWA standards for gate valves and/or butterfly valves. They shall open left. An adjustable type box shall be used with each valve.
- 3. Hydrants shall be A.P. Smith H205, Mueller Super Centurion, Metropolitan 250, M94 or Darling B-62B, and shall open left. (5  $\frac{1}{2}$  foot bury). The color shall be red with silver caps and bonnet.
- 4. Fittings shall be ductile iron and conform to the applicable latest revision of AWWA Standards.

#### C. Installation

- 1. All newly installed water mains shall be hydrostatically pressure tested for strength and leakage in the presence of Water Department personnel. An independent water testing company other than the contractor who installed said water main will conduct the testing. (AWWA Standards C600, Section 4)
- 2. The main shall be flushed prior to chlorinating and then shall be chlorinated in an approved manner by the contractor. After chlorinating, the contractor shall take bacteria samples in the presence of Water Department personnel and send it to a DEP certified laboratory for analysis. The water main will not be accepted until the Water Department is notified in writing by the laboratory that the sample was free of bacteria.
- 3. All pipes shall be installed in trenches with not less than five feet (5') cover from finish grade to top of pipe unless approved by the Superintendent.
- 4. All bends shall be backed with rock and/or concrete to extend to solid undisturbed trench wall and mechanically restrained.
- 5. Where main is installed through ledge, a minimum of twelve inches (12") clearance on all sides of pipe must be maintained. Filling around pipe shall be suitable gravel or sand properly tamped. When laying pipe on soft or swampy ground, unsuitable material shall be removed and replaced with suitable material and approved by the Department.
- 6. Backfilling shall be carefully done and sand or gravel shall be placed and properly tamped to at least twelve inches (12") over the main before general backfilling is started. No boulders or rocks larger than one cubic foot (1cf) in size shall be placed in the trench. Where excavated material is not suitable for replacing in the opinion of the Construction Inspector, it shall be removed from the job and clean gravel substituted.
- 7. All hydrants shall be backed with concrete or other suitable material to a solid unbroken trench wall. All hydrant isolation gates shall be mechanically restrained to the tee as approved by the Superintendent.

All hydrants shall be properly based so they may have proper drainage. Where soil conditions do not allow proper drainage, there shall be excavated a space of at least one cubic yard (1cy). This excavation shall be filled with crushed stone. The hydrant base shall rest upon a flat stone or concrete block for support.

- 8. Water main gate valves shall be located at all intersections and at intermediate points not exceeding one thousand feet (1,000 ft.) in length or as directed by the Superintendent.
- 9. Arrangements for temporary water to be used in construction and/or site work must be made with the Superintendent. (See Attachment I)

#### IX. FIRE PROTECTION

#### A. Fire Lines

- 1. The entire fire line extending from the public water main to the premises and including the control valve at the main, shall be owned and maintained by the property owner.
- 2. Private fire protection lines shall be constructed in accordance with the Water Department specifications and latest versions of the Massachusetts plumbing code, Town Fire Prevention Code and National Fire Code.
- 3. No fire service line shall be laid in the same trench with any other public or private utilities, except a water service pipe. Nor shall any fire service be installed within ten feet (10') horizontally of a sewer pipe. Any connection of fire service line to a public main shall be made in a public way at ninety degrees (90°) to the Town water main.
- 4. The owner or the owner's agent shall be responsible, at its expense, for installing the fire pipe and appurtenances, tapping and making connection to the public water main, and cutting and capping any water service pipe to be abandoned. The owner or his agent shall arrange with at least 24 hours advance notice for any inspection by the Water Department.
- 5. All fire lines are subject to a one-time connection fee, which is based on the square footage of protected area. Fire lines are also subject to an annual charge based on the size of the fire line and number of yard hydrants (See Attachment I) and will be billed quarterly. Such annual charges shall not include or be used for maintenance or repair costs to the fire service pipe. Maintenance and repair costs are to be borne by the owner of the premises.
- 6. The cost of operation and maintenance for the Industrial Way Water Pressure Booster Station or any equivalent facility, will be billed semi-annually to the owners of the properties, which benefit from that facility. There will also be an additional administrative charge per facility (see Attachment I).

#### B. Fire Hydrants

- 1. Unless the Superintendent expressly determines otherwise, with respect to specific locations, all hydrants located in public ways, Town-owned easements or private ways open to public travel shall be owned and maintained by the Water Department.
- 2. Hydrants shall be placed at locations designated by the Superintendent, in conjunction with the Wilmington Fire Chief, to facilitate public fire protection. As a condition of new or extended water service, the Water Department may require an owner, at his expense, to install a hydrant, if the Water Superintendent or Fire Chief determines that such new or extended water service creates additional fire protection requirements or water quality concerns.
- 3. All persons are forbidden to shut off or turn on water from any pipe, hydrant or other fixture intended for fire protection without the approval of the Superintendent, except firefighters for the purpose of extinguishing a fire or practice sessions during reasonable periods.

- Persons found making unauthorized use of fire hydrants shall be subject to M.G.L. 165, Section 11.
- 4. No object, material, debris or structure of any kind shall be placed on or around any fire hydrant or gate box connected with the water system so as to prevent easy access to the hydrant or gate box at all times.

## C. Hydrant Use Permits

- 1. Any use of a fire hydrant by someone other than the Water Department or the Fire Department requires a permit. Fees for hydrant use permits are those set in the Service Charges and Fees (See Attachment I). Certain conditions may require the use of a backflow preventer.
- 2. Hydrant use requires twenty-four (24) hours notice.
- 3. Only Water Department personnel will perform operation of hydrants or valves unless the Superintendent grants written authorization.
- 4. No hydrant use permits will be issued during drought periods or water supply emergencies as determined by the Superintendent, Commission or the DEP.
- 5. Pools will be filled only for residences not supplied by Town water and only when a fire hydrant is a reasonable distance away from location of pool.
- 6. Fire flow tests shall be conducted at such times designated by the Superintendent to minimize the impact of the test on the water system, ice on the roadways and the customers of the Water Department. A copy of any fire flow test results must be forwarded to the Superintendent.
- 7. Any permit fees for hydrant use upon any governmental body, provided that it does not cost the Town any "out of pocket dollars", will be waived.
- 8. Any person found to be operating a fire hydrant without the authorization of the Superintendent will be subject to a fine of \$500.00 and/or Chapter 165, Section 11 of the M.G.L.
- 9. Any person causing damage to a fire hydrant will be held responsible for all costs related to the repair or replacement of said hydrant.
- 10. Hydrant use will be allowed at the discretion of the Superintendent. That permission will not be unreasonably withheld and denial can be appealed to the Water and Sewer Commission. Typically hydrant use will be denied from November 1 to April 15.

#### X. LICENSED DRAINLAYERS

#### A. General

1. A drainlayer license is required for all contractors who perform water main installations, extensions or repairs, fire hydrant installations or repairs, water service installations or repairs (before the meter) and any other work performed on the Wilmington water distribution system, whether on private or public property.

## B. Application Process

- 1. In order to become a licensed drainlayer in the Town of Wilmington, a completed application must be submitted to the Superintendent's office with a \$100.00 application fee.
- 2. Once either the Assistant Superintendent or the Construction Inspector checks references, recommendation is made to the Superintendent. The Superintendent may deny, approve or approve the license with restrictions, as he deems appropriate.
- 3. A Massachusetts Workman's Compensation Affidavit must be filled out and kept on file with the license at the Superintendent's office.
- 4. An original certified \$5000.00 drainlayer bond must be kept on file with the license at the Superintendent's office. Additional bonding may be required, upon review of the project, by the Superintendent.
- 5. Drainlayer licenses expire on the 31st of March each year. A drainlayer may apply for license renewal by filling out the renewal application, submitting the required insurance documents and paying a \$100.00 dollar annual fee.
- 6. If work has not been performed in Wilmington under the license within two years prior to renewal application, the drainlayer must reapply in accordance with Section IX:B:1-4 of these rules and regulations.

#### C. Responsibilities as a Licensed Drainlayer

- 1. The licensed drainlayer must ensure that application is made at the Superintendent's office before any work can be performed. At the time of application, fees are paid and should be accompanied by a copy of a plan with the correct map and parcel number, which can be obtained at the Assessor's office.
- 2. All inspections must be scheduled by calling the Superintendent's office. Inspections must be scheduled at least 24 hours in advance. Inspections will be scheduled on a first call basis.
- 3. Inspections needed outside of the Water Department's normal business hours will be billed to the drainlayer as outlined in the Service Charges and Fees (See Attachment I).
- 4. An on-site pre-construction meeting between the contractor, i.e. drainlayer/engineer, and the Construction Inspector prior to commencement of the work may be required at the discretion of the Superintendent or his designee.
- 5. The Construction Inspector must be present for all taps to the water main.
- 6. All joints and/or tees shall be left exposed until inspected. Any portion of installation back filled prior to inspection will have to be re-exposed by the drainlayer.

- 7. A representative of the licensed drainlayer must be present on the job when the work is being performed. If the licensed drainlayer allows someone else to work under their license, the licensed drainlayer is responsible and must be present. If the licensed drainlayer is not present at the time of inspection, the inspection will not be performed.
- 8. Under no circumstance is anyone other than Water Department personnel allowed to operate any gate valves, hydrants or curbs.
- 9. Temporary emergency licenses and/or permits can be issued by the Superintendent for the benefit of the public health and safety, i.e. water main breaks.
- 10. Any drainlayer, licensed by the Town of Wilmington Water Department, that fails to demonstrate the expertise needed to install or repair water mains, services and appurtenances will have a restriction placed upon his license commensurate with the level of demonstrated ability, or their license may be revoked altogether at the discretion of the Superintendent.

#### XI. CROSS CONNECTION CONTROL ORDINANCE

## A. Purpose

- 1. To protect the public potable water supply served by the Wilmington Water & Sewer Commission from the possibility of contamination or pollution by isolating such contaminants or pollutants, which could backflow or backsiphon into the public water system.
- 2. To promote the elimination or control of existing cross connections, actual or potential, between its customers in-plant potable water system and non-potable systems.
- 3. To provide for the maintenance of a continuing program of cross connection control which will effectively prevent the contamination or pollution of all potable water systems by cross connection.

## B. Authority

- 1. As provided in the Federal Safe Drinking Water Act of 1974, (Public Law 93-523), and the Commonwealth of Massachusetts Drinking Water Regulations, 310 CMR 22.22, the water purveyor has the primary responsibility for preventing water from unapproved sources or any other substances from entering the public potable water system.
- 2. Wilmington Water and Sewer Commission, Rules and Regulations, adopted May 24, 1990.

#### C. Responsibility

1. The Water & Sewer Commission shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow or backsiphonage of contaminants or pollutants. If, as a result of a survey of the premises, the Superintendent or his designee determines that an approved backflow prevention device is required at the town's water service connection or as inplant protection on any customer's premises, the Superintendent, or its delegated agent, shall issue a cross connection violation form to said customer to install approved backflow prevention devices. The customer shall, within a time frame determined by the Superintendent, install such approved device or devices at his own expense, and failure or refusal or inability on the part of the customer to install said device or devices within the specified time frame shall constitute a ground for discontinuing water service to the premises until such device or devices have been properly installed.

#### D. Definitions

- 1. **Air Gap Separation:** The method of preventing backflow through the use of an unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood level rim of the receptacle. This unobstructed vertical distance shall be two times the diameter of the line supplying water, but never less than one inch.
- 2. **Approved:** Accepted by the Reviewing Authority as meeting an applicable specification stated or cited in this regulation or as suitable for the proposed use.

- 3. **Approved Backflow Prevention Device or Devices:** A method to prevent backflow approved by the Department for use in Massachusetts.
- 4. **Atmospheric Vacuum Breaker:** An approved backflow device used to prevent back siphonage, which is not designed for use under static line pressure.
- 5. **Auxiliary Water Supply:** Any water supply of unknown or questionable quality on or available to the premises other than the supplier's approved public potable water supply.
- 6. **Back Pressure:** Pressure created by mechanical means or other means which causes water or other liquids or substances to flow or move in a direction opposite to that which is intended.
- 7. **Back Siphonage:** A form of backflow due to reduced or subatmospheric pressure within a water system.
- 8. **Backflow:** The flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply from any source other than the intended source.
- 9. **Backflow Preventer with Intermediate Atmospheric Vent:** A device having two independently operating check valves separated by an intermediate chamber with a means for automatically venting it to the atmosphere, in which the check valves are force loaded to a normally closed position and the venting means is force loaded to a normally open position.
- 10. **Barometric Loop:** A loop of pipe rising at least 35 feet, at its topmost point, above the highest fixture it supplies.
- 11. **Certified Backflow Surveyor/Tester:** An individual who holds a valid Massachusetts Backflow Prevention Device Testers Certificate, or a Surveyors Certificate or a combination Tester/Surveyor Certificate issued by the Department.
- 12. **Commission:** The Town of Wilmington Water & Sewer Commission or owner or operator of a public water supply system.
- 13. **Contaminant:** Any physical, chemical, biological or radiological substance or matter in water.
- 14. **Cross Connection:** Any actual or potential connection between a distribution pipe of potable water from a public water system and any waste pipe, soil pipe, sewer, drain, or other unapproved water source.
- 15. **Cross Connection Violation Form:** A violation form designated by the Commission, which is sent to the owner by the water supplier with copies sent to the Department, plumbing inspectors and Board of Health delineating cross connection violations found on the owner's premises and a procedure for corrective action.
- 16. **Department:** The Massachusetts Department of Environmental Protection.
- 17. **Design Data Sheet:** shall mean a form, designated by the Commission, which is submitted to the Commission or its designee, along with plans for each installation of a reduced pressure backflow preventer, double check valve assembly, or for each change to any such device already installed, describing and showing the details of the specific installation.

- 18. **Double Check Valve Assembly:** A backflow prevention device, which incorporates an assembly of check valves, with shut-off valves at each end and appurtenances for testing.
- 19. **In-Plant Protection:** The location of approved backflow prevention devices in a manner, which provides simultaneous protection of the public water system and the potable water system within the premises.
- 20. **Inspection:** shall mean the physical examination and testing of an installed backflow prevention device to verify that the backflow prevention device is functioning properly
- 21. **Non-Potable Water:** Water that is not safe for human consumption or which is of questionable quality.
- 22. **Owner:** Any person maintaining a cross connection installation or owning or occupying premises on which cross connections can or do exist
- 23. **Permit:** A document issued by the Commission, which allows a cross connection installation.
- 24. **Person:** Any individual, corporation, company, association, trust, partnership, the Commonwealth, a municipality, district, or other subdivision or instrumentality of the United States, except that nothing herein shall be construed to refer to or to include any Native American Tribe or the United States Secretary of the Interior in his capacity as trustee of Native American lands.
- 25. **Pressure Vacuum Breaker:** An approved backflow prevention device designed to prevent only back siphonage and which is designed for use under static line pressure and which has necessary appurtenances for testing.
- 26. **Reduced Pressure Backflow Preventer:** An approved backflow prevention device incorporating (1) two or more check valves, (2) an automatically operating differential relief valve located between the two checks, (3) two shut-off valves, and (4) necessary appurtenances for testing.
- 27. **Residential Dual Check:** An assembly of two spring loaded, independently operating check valves without tightly closing shut-off valves and test cocks. Generally employed immediately downstream of the water meter to act as a containment device.
- 28. **Reviewing Authority:** The Wilmington Water & Sewer Commission, its designee, or the local plumbing inspector, authorized by M.G.L. c. 142 and licensed by the Board of State Examiners of Plumbers and Gas Fitters, are responsible for the review and approval of the installation of an approved backflow prevention device.

## E. Administration

- 1. The Superintendent will operate an active cross connection control program, to include the keeping of necessary records, which fulfills the requirements of the State DEP's Cross Connection Regulations and is approved by the Department.
- 2. The owner shall allow his property to be inspected for possible cross connections and shall follow the provision of the Commission's program and the Department regulations.

#### F. Requirements

#### 1. Commission

- a. On new installations, the Superintendent or his/her designee will provide on-site evaluation and/or inspection of plans in order to determine the type of backflow preventer, if any, that will be required, and notify the owner of plan approval requirements by the appropriate reviewing authority.
- b. For premises existing prior to the start of this program, the Superintendent or his/her designee will perform surveys of the premises and reviews of as-built plans and issue a cross connection violation form to the owner detailing any corrective action required, the method of achieving the correction, and the time allowed for the correction to be made. The time period allowed shall depend upon the degree of hazard involved.
- c. The Commission will not allow any cross connection to remain unless it is protected by an approved backflow preventer for which a permit has been issued and which will be regularly tested to ensure satisfactory operation.
- d. If the Superintendent or his/her designee determines at any time that a serious threat to the public health exists, the water service will be terminated immediately.
- e. The Water Department shall have on its staff, or shall have a delegated representative, who is a backflow prevention device tester/surveyor certified by the Commonwealth of Massachusetts.

#### 2. Owner

- a. The owner shall be responsible for the elimination or protection of all cross connections on his premises.
- b. The owner shall be responsible for applying for and obtaining all necessary approvals and permits for the maintenance of cross connections and installation of backflow prevention devices, and applying annually for the renewal of each permit.
- c. The owner shall have any device that fails an inspection or test repaired or replaced by a licensed plumber within fourteen days.
- d. The owner shall inform the Water Department of any proposed or modified cross connection and also any existing cross connections of which the owner is aware but has not been found by the Towns cross connection representative.
- e. The owner shall not install a by-pass around any backflow preventer unless there is a backflow preventer of the same type on the bypass. Owners who cannot shut down operation for testing of the device(s) must supply additional devices necessary to allow testing to take place.
- f. The owner shall install backflow preventers in a manner approved by the Department and by the Commission.
- g. The owner shall install only reduced pressure backflow preventers and double check valve assemblies approved by the State DEP.
- h. Any owner of industrial, commercial, or institutional premises having a private well or other private water source must have a

permit if the well or source is cross connected to the Commission's system. Permission to cross connect may be denied by the Commission. The owner may be required to install a backflow preventer at the service entrance if a private water source is maintained even if it is not cross connected to the Commission's system.

- i. The owner of any residential premises having a private well or other private water source will not be allowed a physical cross connection with the public water supply system.
- j. The owner shall be responsible for the payment of all fees for permits, device testings, retestings in the case that the device fails to operate correctly, and second re-inspections for non-compliance with Commission or Department requirements.

#### G. Degree of Hazard

1. The Commission recognizes the threat to the public water system arising from cross connections. As such, the Commission, whereas it is responsible for the quality of the public water supply, may require a containment device on the water service entrance to any customer who, as a result of unprotected cross connections, could contaminate the public water supply system.

#### H. Enforcement

- 1. The Commission shall not allow a cross connection to exist with the public water supply system unless it is considered necessary and all appropriate approvals and permits have been issued.
- 2. Unprotected cross connections are in direct violation of the Drinking Water Regulations of Massachusetts General Laws, Chapter III, Section 160A prescribe a fine of \$500.00 and/or a year in jail for each willful violation of a Drinking Water Regulation promulgated by the Department.

## I. Approval Procedures

- 1. As per Massachusetts General Laws, Chapter III, Section 160A and Section 22 of the Drinking Water Regulations of Massachusetts (310 CMR 22.22), all installations of reduced pressure backflow preventers and double check valve assemblies in cross connection installations must be issued a permit from the Commission or its designee.
- 2. In order to be issued a permit, a plan showing each installation must be submitted to the Water & Sewer Superintendent for review and approval (locations and addresses attached). This plan must include the following:
  - a. A completed design data sheet.
  - b. A schematic showing incoming water lines, the separation of domestic and process water, the type and model # of the device to be used, and all clearances involved in the installation.
- 3. After review and approval of plans and the subsequent installation of backflow prevention devices, an initial inspection must be arranged to verify the correct installation of the device and to conduct a test of the device to ensure proper operation. The permit to maintain a cross connection will be issued by the Commission or its designee after such

initial inspection has been conducted by the Water & Sewer Commission.

## J. Existing In-Use Backflow Prevention Devices

1. Any existing backflow preventer shall be allowed by the Water Department to continue in service unless the degree of hazard is such as to supersede the effectiveness of the present backflow preventer or result in an unreasonable risk to the public health. Where the degree of hazard has increased, as in the case of a residential installation converting to a business establishment, any existing backflow preventer must be upgraded to a reduced pressure backflow preventer, or a reduced pressure backflow preventer must be installed in the event that no backflow device was present.

## K. Periodic Testing

- 1. Reduced pressure backflow preventers assemblies shall be tested and inspected at least semi-annually and double check valve assembly devices shall be tested at least annually by the Water Department or its agent. The Town reserves the right to perform additional tests at any time.
- 2. Additional periodic testing may be performed by the Water Department certified tester or its delegated representative, who shall be a certified tester.
- 3. The testing shall be conducted during the Water Departments regular business hours. Exceptions to this, when at the request of the owner, which may require additional charges to cover the increased costs to the Town.
- 4. Any backflow preventer which fails during a periodic test must be repaired or replaced by a licensed plumber. When repairs are necessary, upon completion of the repair, the device will be retested at the owner's expense to ensure proper operation. High hazard situations will not be allowed to continue unprotected if the backflow preventer fails the test and cannot be repaired immediately. In other situations, a compliance date of not more than fourteen days after the test date will be established. The owner is responsible for spare parts, repair tools, or a replacement device. Parallel installation of two devices is an effective means of the owner ensuring that uninterrupted water service remains during testing or repair of devices and is strongly recommended when the owner desires such continuity.
- 5. Backflow prevention devices will be tested more frequently than specified above in "A" in cases where there is a history of test failures and the Superintendent feels that due to the degree of hazard involved, additional testing is warranted. Cost of the additional tests will be born by the owner.

## L. Records and Reports

- 1. Records: The Superintendent will initiate and maintain the following:
  - a. Master files on customer cross connection tests and/or inspections.
  - b. Master files on approved cross connection installations.

- c. Copies of lists and summaries supplied to the Massachusetts Department of Environmental Protection.
- 2. Reports: The Water Department will submit the following to the DEP:
  - a. Initial listing of high hazard cross connections.
  - b. Initial listing of low hazard cross connections.
  - c. Annual update lists of Items 1 and 2 above.
  - d. Annual summary of cross connection inspections and surveys.

#### M. Strainers

1. The Commission strongly recommends that all new and retrofit installations of reduced pressure backflow preventers and double check valve assemblies include the installation of strainers located immediately upstream of the backflow device. The installation of strainers will preclude the fouling of backflow devices due to both foreseen and unforeseen circumstances occurring to the water supply system such as water main repairs, water main breaks, fires, periodic cleaning and flushing of mains, etc. These occurrences may "stir up" debris within the water main that will cause fouling of backflow devices installed without the benefit of strainers.

## N. <u>Lawn/Garden Irrigation</u>

- 1. All new or existing municipal, commercial, industrial and institutional property owners are required to have in place, a reduced pressure backflow device or a double check valve assembly device on their irrigation system. The type of device will be decided by the Superintendent or his/her designee upon submission and approval of a Design Data Sheet and plumbing plan.
- 2. In regard to existing pressure vacuum breakers, these existing devices must be installed at a minimum of two feet above the highest sprinkler head, as determined by the Superintendent or his/her designee or be replaced by a reduced pressure backflow device or a double check valve assembly.
- 3. These existing pressure vacuum breakers devices will be inspected by the Superintendent or his/her designee, and may continue to be utilized unless it fails in testing, at which time it must be replaced by a reduced pressure backflow device or a double check valve assembly, as determined by the Superintendent or his/her designee.